



Transport
Roads & Maritime
Services

APPENDIX C

Community feedback

OCTOBER 2014

APPENDIX C

Community input from workshop exercise

Workshop 1: Sapphire to Moonee Beach (Cunninghams Creek)

The following questions were posed by workshop participants at the first community workshop.

Question 1. Strengths of the current monitoring proposal?	<ul style="list-style-type: none">• Current proposed locations• At least Roads and Maritime is doing monitoring• You can actually go with some speed into town now after years of highway disruption• Re-checking previous sites• We want RI monitor to stay, do not move it to another location.• Nothing.
Question 2. Weaknesses of the current monitoring proposal?	<ul style="list-style-type: none">• Moonee Beach wrong side of highway. There are no monitors in Moonee Village east of the highway where the noise can be heard on the headland. No monitors in Moonee Beach east. Pre construction monitoring for best practice is not necessarily reflecting resident comfort• South of Alpini Place off Split Solitary Road, there needs to be noise monitoring where the current barrier stops. The traffic noise from the south affects homes all the way down to the caravan park. Also the lack of barriers and the removal of trees from the old highway to the north of Split Solitary also is loud all night from the north.• Not enough monitors on the Eastern side of the highway.• Not monitoring during rain prevents the effects of low cloud reflecting noise backwards.• More sound monitors are required. Especially in the valley of the Old Coast Road• You are going to tell us if there is a problem. We are telling you there is a problem.• R1 location inadequate, doesn't correlate to 817 Pacific Highway (original location)

	<ul style="list-style-type: none"> • Doesn't take into account inadequate background modelling (2005) • Also cold air seems to carry the noise • Seven days of monitoring is not enough, doesn't reflect a true indication of Coffs Harbour fluctuating traffic, holiday makers during school holidays, approx 12 weeks per year are school holidays • No point monitoring where there are no people • M1 is located on the eastern side of the noise wall. M1 needs to be on the other side. Monitoring at M1 can only be favourable to Roads and Maritime due to the new noise wall on the east. • No monitor east of highway at Moonee, north of interchange • Need to confirm if M locations will still be monitored • Location of M1 may give false reading due to protection of cutting.
<p>Additional feedback comment received regarding monitoring near Old Coast Road area</p>	<ul style="list-style-type: none"> • Concerns and comments from representatives of about six property owners from a much larger number (over 40) of residents in the Old Coast Road area, in particular those residents immediately adjacent to the old Hunter Close section near the Hunter Close overpass on the western side of the highway. • The study is ineffective and does not address any of the issues. • The sites as proposed on the maps at the workshops are useless. For example the initial testing done at M1 (Korora or southern end of the project) was initially done when the road was one closer to study area and before the introduction of a noise wall. Any study done at that location now does not reflect the issues of residents who do not have the benefit of the newly built noise wall. Residents opposite the noise walls result could or would seem more likely to be worse. Any study done at this location or any other does not reflect the noise issues encountered by residents on the western side of the highway and at our location and there has been no consideration what so ever taken into account for these properties. Even by your own (Roads and Maritime) admission previous tests have never been completed in this area. Why would this development ever be given the green light without undertaking such tests? • The positioning of the sound study at this location (M1) will almost certainly deliver a favourable test result from the study for the Roads and Maritime. This was no doubt the intention of the Roads and Maritime when initially

selecting test sites. On speaking with our lawyers yesterday they have advised us that it would appear that the Roads and Maritime are fully aware of this and that they have been negligent in their studies and or study locations by not including areas which have not benefited from mitigation works or from areas which are obviously affected by the highway works.

- The area above (Old Coast Road/Hunter Close) is now closer to the dual lane highway, the highway is over 1m higher than it was originally reported to be in the design. The contractor has removed a significant amount of landfill to complete the works and create a temporary access for Sapphire residents which was not replaced. This has created a vacuum or valley for noise to escape travelling straight up the hill hitting houses front on.
- Residents at this location have had a meeting with members of the project team, we were promised and guaranteed that Roads and Maritime would attend our properties and conduct noise assessments from our properties. Not other locations. Failure to keep this promise will be a breach of agreement. We were advised that these tests would be conducted on our properties and if levels at our properties rose then mitigation would occur.
- Residents in this area have significant and I mean significant noise issues. The first of our properties is less than 30 metres from the road, there is no noise wall, there is no buffering and you have removed the earth a significant amount of earth.
- There is severe noise at night and day, (mostly at night) from vehicles passing under the Hunter Close Bridge, the noise from this location echoes and vibrates up the hill. It is like a valley of noise that has been created. This was not on the plans provided, there was supposed to be a large earth mound and you have taken this away from the original concept that was published.
- The wall on the eastern side of the highway protects residents to the east but all as it does is rebound the noise up the hill, there is no protection and a noise wall is required on the other side.
- There is minimal or no planting down the centre of the highway, or along the western side of the noise wall. Even this would have significant impact on filtering noise buffering off the wall. There is little or no planting on the western side of the highway with trees and bushes that will grow thick and

	<p>dense say up to 5-8metres in height.</p> <ul style="list-style-type: none"> • I have attached a picture for you detailing houses affected and where the noise wall is required. • Further to this, trucks coming out of the 110km zone and down the hill at Korora in front of Opal Cove, have to reduce to 80km/h. They are on the air brakes all the way. There is no noise wall at this location and residents there too are being affected by the new highway. Trucks then once at the bottom of the hill hit another 100km zone and crank back the gears and gather speed. It is another ridiculous stretch of road that residents have to deal with. • We have been pleading with information and feedback for over four years. We were told and we will hold onto this that these issues would be resolved at completion. • We look forward to your response and confirmation that a noise test will be completed near our properties at the location nominated.
<p>Question 3. Suggestions for additional monitoring locations?</p>	<p>Moonee Beach</p> <ul style="list-style-type: none"> • Eastern side. Majority of population live beachside • East of highway at Moonee Beach corner, Tidal Cres, Estuary Drive and Rushton Ave area. Engine noise and engine breaking is extreme • Eastern side of highway, northern side of Moonee overpass • Needs to be on Eastern side of highway at Moonee Beach. Moonee shopping area (M4 is too far away) • Beside shopping centre (east side) • North of interchange on Eastern side • Moonee Beach east just 200 yards off shopping centre • Moonee monitor on the main residential side, there is a great gap on the other side • Moonee eastern side, just south of shopping centre. Possibly Woodhouse off Dawn Drive • Top of hill- Woodhouse Rd Moonee. <p>Sapphire</p> <ul style="list-style-type: none"> • Due to the topographical characteristics of Sapphire Valley (opposite Service Station) monitoring sites need to be provided further west. E.g. in area originally shown as being 50dBA area- this also applies to other

	<p>valleys further north</p> <ul style="list-style-type: none"> • At least 300m north of Moonee Beach flyover. Woodhouse St peak • At Sapphire between Headland and Split Solitary Roads • Western side of Sapphire (Hayes Creek). Sapphire noise wall has made an amphitheatre and the noise is now on the western side of the Highway. Western side of Sapphire • Reposition M1 to Aqualuna / Sapphire Pines Apartment. This will give a clearer indication • On old highway where barrier stops - North of Headland Road • Western side of highway outside near 49 Hunter Close (now Old Coast Road). Lots of people live on The Mountain Way, Old Coast Road, Hunter Close no consideration at all. All noise walls are on East side • Some close to highway some 400-500m away and because noise is travelling further we are hearing it for longer. <p>Korora</p> <ul style="list-style-type: none"> • At Old Coast Road Korora • Korora - outside Opal Cove - trucks air brakes reducing from 110 to 80kmh • Lower Gaudrons Rd • Each valley on the western side of the Hwy: Old Coast Rd, The Mountain Way, <p>Gaudrons Road, Sugarmill Road</p> <ul style="list-style-type: none"> • More noticeable noise increases in the Mountain Way Region rising from traffic travelling south from Wakelands Road area through to Old Coast Road overpass • Middle of roundabout, eastern side of highway, Split Solitary Road • 40 Sullivans Road opposite retaining wall. I have lived here for 30 years.
<p>Question 4. Why it is important to monitor at the locations you suggest?</p>	<ul style="list-style-type: none"> • To assess the impact on Moonee Beach Village (the trucks can be heard at the Lagoon and at the beach) • Truck braking engine noise near Moonee interchange • Because increased noise is constant • To determine if noise levels are within policy or not and/or injurious to residents • To stimulate a cause of action for remediation works • It was not monitored before and traffic is only going to get worse as time

	<p>goes on</p> <ul style="list-style-type: none"> • Need to ascertain reflected sound of the newly erected wall • 8 lanes of traffic on Split Solitary Overpass • Acceleration of vehicles on access ramps • Noise will be worse in summer when windows are open at night • Large density of housing affected by lagoon areas, opened-up valleys and changes in topography • Because we have not had a full night's sleep since this road opened? We also need protection from lights • Because soil was taken away and created a valley for temporary access to Headland Road • Because noise wall on opposite side bounces noise back into the valley. Echo from cars and trucks going under Hunter Close overbridge echoes up valley to residents on western side. Noise is ten times as much as Old Highway • Prevalent north/north west winds during summer when windows open and trying to sleep • Also when air is still, noise is high • More homes about to be built in continuation of Moonee Creek Dr to the north (600 houses proposed) and also north Sapphire • Trees were removed from Moonee area and to the north when upgrade commenced • Monitoring needed to cover all residential areas • Lived here for 17 years, beds shaking esp. Tuesday to Thursday night. • I have lived at Rushton Ave for over 30 years - the noise is louder than our TV/radio when we have the doors shut. It is a high pitched sound • Quality of life, necessity of sleep • Value of property • 1 km north of M4 "Forest Glen Estate: over 150 families live in this valley west of the highway. High pitch whine of trucks travels up the valley. They need a barrier.
<p>Question 5. What is your top priority for additional monitoring?</p>	<ul style="list-style-type: none"> • Monitoring must be done within Moonee Beach residential area east of the highway • Improve the noise travelling along the gully west of Crystal Waters estate (Crystal Drive)

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| | <ul style="list-style-type: none">• I hope you monitor when there is heavy cloud cover. The noise is worse then• Sunday afternoon monitoring• Monitor in peak travel periods, e.g. Christmas, Easter and School holidays. Monitoring for only 7 days is not long enough. Coffs Harbour has peak times (holidays)• Monitoring at Sapphire, Crystal Drive and Split Solitary Drive• Monitor anywhere where large swathes of trees have been removed (i.e. forests) that have opened up large areas to noise• Monitoring at Hunter Close/Old Coast Road/Mountain Way• Monitoring at Moonee Beach. Moonee has a high density of people and growing• Moonee Village east of highway. Disregard the shopping centre noise - Rushton Ave example• Monitoring at bottom of Korora Hill near Opal Cove• Monitoring at Split Solitary Road roundabout• Directly outside Sapphire Pines building. Apartment 33 & 32. There are 64 apartments off the southern side which means it is a village on its own. There are over a hundred people involved.• Monitor truck noise where speed is reduced to 80kms going south - engine braking right outside apartments. |
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Workshop 2: Cunninghams Creek to Hearnese Lake Road Including Heritage Park, Emerald Beach and Sandy Beach

The following questions were posed by workshop participants at the second community workshop.

Question 1. Strengths of the current proposal?	<ul style="list-style-type: none">• Good that additional monitoring is being considered• Good for understanding noise at highway
Question 2. Weaknesses of the current proposal?	<ul style="list-style-type: none">• M5 - not at road level. Not low and between heavy vegetation• They are not monitoring noise within the community• Not enough monitors. We need more• More than one week monitoring, adequate time should be more than two weeks to account for different weather• Insufficient locations• Location of M5 - on high ground above highway• R4 - although monitor is in place it is further away from highway. I would like to see levels from both properties i.e. No 1 Emerald Heights Drive. Monitor is located on Emerald Heights Drive which is 50-100 m further away from highway than No 1 Emerald Drive. Noise is echoing off the on/off ramp to Emerald Beach• M6 doesn't account for open space on Eastern side of highway• Does not take into account topography which funnels sound much further than the short trip either side of the highway currently studied.• Why only 7 days when there are no holidays? 7 days of monitoring is insufficient• Traffic noises / not monitored in the rain - noise travels further and is louder in the rain - it rains a lot here• Sound appears to travel further and be louder when the weather is colder. Is it appropriate to monitor in October only?• Heritage Park - Why is monitoring at certain points only? If you are monitoring 4 and then M5, what about from Bucca Rd through to Killara Ave overpass where all the trees have been cut and sound travels across the flat areas. This has to be

	<p>checked</p> <ul style="list-style-type: none"> • The averages required by the Policy doesn't take into account the normal fluctuations of truck movements on the highway. Monitoring is based on policy not quality of life • Needs to take into account the change in noise levels during winter including wet soil, wind direction, still cold air. October is too late to accurately reflect noise levels • Monitoring points do not take into account the amplification of noise over distance and funnelling up valleys as in Avocado Heights • We don't live on the highway (monitor where we live) • According to information given vegetation removal has not been put into the model at Lake Russell and Emerald Beach • R3 does not take into account the noise suffered by residents (Emerald) on the north of Fiddaman Road including those on Fishermans Drive who get reflected noise from the Emerald Heights noise wall • R3 needs to be positioned closer to the highway and not behind the natural buffers created by topography • Mitigations to be based on model output rather than ground truthing effect at extent of model bands • Important seasonal variations and wind is not included in the modelling • Does not take into account consideration of individual situations • Eight monitoring points is not enough to follow your statement that all properties will be monitored • Seems like the monitoring is near the wall at Sandy where I think the wall on the north is too short. South end of Sandy west side, noise funnels up Mahogany Road straight into 47 Diamond at the top gates front and back.
<p>Additional feedback</p>	<p>Following the workshop additional comments were received regarding proposed monitoring near 3 Fiddaman Road:</p>

	<p>Although 3 Fiddaman Rd is one of the closest houses to the highway, it is considerably lower than the highway so that much traffic noise would presumably pass above the house. As truck noise travels up at around 45 degrees, this is a significant consideration. Furthermore, the low headlight barrier wall could also screen this particular house from the brunt of highway noise.</p> <p>Please revisit the topographical map for Emerald and confirm that either:</p> <ol style="list-style-type: none"> 1) 3 Fiddaman is indeed the most noise affected house or 2) A different house, close to the highway, yet more elevated and less shielded by the light barrier wall should be the site of the first noise monitor.
<p>Question 3. Suggestions for additional monitoring locations?</p>	<p>Heritage Park</p> <ul style="list-style-type: none"> • Heritage Estate and Moonee additional monitors closer to Killara Ave to asses noise levels without the vegetation. Also placed at road level • Heritage Park - North and South of Estate • M5 is uphill, with hills and shrubs to the west so it won't give a true reading for lower lying residents of Heritage Park, to the north and south of it • Move M5 north to level ground near highway and homes, midway between Point 5 and Lake north of Point 5 • Need a monitor on the south side of Killara Ave as the noise is funnelled through the area between the children's home and the exit ramp/roundabout at Killara Ave near to the Slannes Creek bridge area • A monitor in the easement opposite Killara Ave should gather a more realistic measure of what the residents in Heritage Park are up against. The noise travels west down the easement and branches out left and right wherever the low areas go, especially when the winds are from the east. <p>Emerald Beach</p>

- At the beginning of Fiddaman Rd.
- Fiddamans Rd approx No. 59.
- No. 12 Lilly Pad Lane
- 14 Lilly Pad Street, Emerald Beach, (near Smiths Lane)
- No. 3 Lake Breeze Lane
- Between Kumbaingeri Cul-de-sac and the highway
- In the vicinity of Smiths Road access bridge
- Emerald Beach Interchange
- Azure Ave, Emerald Heights
- 1 Emerald Heights Drive
- Lake Russel Drive - both ends. Lake Russell north of M5
- East Street
- Fishermans Drive No. 13 or No. 20
- Also need a monitor on the north side of Fiddamans Creek Road say more towards the caravan park as the noise appears to be funnelled down the creek and down Fishermans Road.

Sandy Beach

- Beach end - Diamond Head Drive north side
- South Sandy- Iron Bark Ave, Diamond Head Drive, Redbox Cres around no. 72
- Need monitoring station south of Diamond Head Drive overpass (the sound wall needs to be extended up to the western cutting, there is direct line of sight and sound, not buffered by wall or cutting directly affecting, particularly 3 Mahogany, 5 Mahogany and 50 Diamond Drive)
- Eastern side of highway re M6 heading south to capture Sandy Beach eastern streets.

Casuarina Court

- North of R4 between Casuarina Court and highway near retention basin (neighbour measured 78dB)
- Noise funnels north of the retention basin to reflect the noise
- Graham Drive - Casuarina Court.

	<p>Overall</p> <ul style="list-style-type: none"> • Move monitors away from highway • Attempt to have both sides of the highway at each point monitored. Some of the monitors should be "in" built up areas - flat and hills away from the highway • Place monitors away from highway edge "echo" • Place monitors in areas that have sound walls on both sides of the highway to detect echo • Place sound monitoring at end/behind sound barriers to monitor sound funnelling between barriers. • Place another monitor half way between R4 and M6.
<p>Question 4. Why it is important to monitor at the locations you suggest?</p>	<ul style="list-style-type: none"> • The houses on Fiddaman Road are the ones that will push our community into the realm of consideration for a noise wall. If the monitor is here then we know it is accurate for that area and you can use the modelling for the rest of Emerald Beach. • 1 and 2 current monitor not capturing open area. Point 5 is much higher and does not capture where road is higher than before construction. <p>Noise/sleep disturbance</p> <ul style="list-style-type: none"> • Increased noise especially sleep disturbance decreasing quality of life, amenity and property value • Noise level increases • Noise has increased through easement travelling to back of Heritage Estate impacting on our quality of life • The noise carries a further distance due to wind • To catch noise coming from north direction • Noise is pushed behind the noise wall • Noise relevant in areas close to beach never previously impacted by noise • Constant noise disturbing sleep • Sleep deprivation • Sleep is affected • Quality of life • So we can have a conversation in the backyard

	<ul style="list-style-type: none"> • Family/business negatively impacted - stress • Devaluing our properties • Value of land and property • Because we are all suffering from extra noise levels • The noise is excessive to what we had before • Residents much further back from highway have been impacted due to increased noise • To avoid social rebellion • Because we have had noise mitigation and still have problems with noise • Vibration is constant. <p>New road surface</p> <ul style="list-style-type: none"> • Effect of fine- aggregate surface is less than expected for Trucks, which generate a more penetrating, high-pitched noise than on a coarser surface. • Low road noise surface has apparently increased noise. <p>Light pollution</p> <ul style="list-style-type: none"> • Light pollution is annoying
<p>Question 5. What is your top priority for additional monitoring?</p>	<p>Location</p> <ul style="list-style-type: none"> • One monitor at Killara Ave / Cunninghams Creek • Keep monitor at M5 • One monitor in between M5 and Killara Ave / Cunningham's Creek. • On my property the decibel level is 70-75 dB at Heritage Park north • Monitoring Emerald Beach and Heritage Park • In areas where sound barriers are on both sides of highway to monitor echo • From Bucca Road north through past Killara Ave overpass to M5. All of this area has numerous trees cut down. It is level and sound travels right through Heritage Park affecting all homes in this area

- Easement in open between Bucca Road and Killara Ave
- Fiddaman Road entrance as it's close to the highway
- Fishermans Drive and various locations for model validation.

Methodology

- Monitors to measure the actual noise (dB) of noise in residential areas
- Just more monitoring and for a longer time. Spend a bit more for a better result please
- To confirm modelling
- More monitors
- An honest reading from all monitors
- Apart from a wider selection of locations (including on top of hilly terrain and in valleys), to avoid "spot" monitoring, monitoring needs to take place in a variety of weather conditions and not just in one week of spring conditions, such as winter, summer, and during holidays.
- A more thorough testing program tailored to specific concerns
- Include Westerly/north westerly winds in spring September and October - more noise Eastern side of highway
- Include topography and wind factor e.g. wind direction
- Top priority is longer noise recording over time to include all wind directions - temporal aspect include in sampling -sound is weather dependent
- All suggestions are top priority because we are all affected
- To address and appreciate the unacceptable noise now present due to road constructed

Workshop 3. Woolgoolga bypass

The workshop started with an apology being given on behalf of Mr Andrew Fraser MP, Member for Coffs Harbour. He was unable to attend as Parliament was sitting in Sydney.

Question 1. Strengths of the current proposal?	<ul style="list-style-type: none">• More monitors than previously used• Only strength is that readings this time of year are beneficial to Roads and Maritime for favourable results because of wind direction, primarily north east• More monitors than previously used• Additional sites being monitored but is this enough?• None
Question 2. Weaknesses of the current proposal?	<ul style="list-style-type: none">• R7 was previously done with limited initial data, validity?• No east side monitors between R7 and R8, along Woolgoolga Creek• Excessive reliance on model when real data is available• Not enough places in areas of high density housing• Need double the monitoring locations• This time of year prevailing winds are north to north east so monitors on the Eastern side will be quieter than they are over winter when south to south east winds are blowing. This will result in favourable results to Roads and Maritime• Wind direction and engine braking aren't monitored• Big gap between R7 and R8• Lack of monitors in high positions where noise is most• Traffic noise goes straight over R6, also the only monitor on the west side of the highway.
Question 3. Suggestions for additional monitoring locations?	<ul style="list-style-type: none">• 30 Park Ave Woolgoolga. Park Ave went from no noise to unbearable• Newmans Road, Woolooga (near houses)• Exhaust brake monitoring for descent into Woolgoolga Creek• Locate near residences e.g. 21 Gresham Drive• 240 Newman Road, Woolgoolga, 6 Freeman's Road, Woolgoolga• At the corner of Newman Road, Woolgoolga• At the corner of Newmans Rd and Gresham Drive and any other high elevated areas• Unwins Road south• 215 Bark Hut Road corner of Palmer St Woolgoolga

	<ul style="list-style-type: none"> • Crossing over Woolgoolga Creek, noise spreads across the valley • Amiee Place, high point • More monitoring west of highway • As many properties as possible on both sides of bypass to get an accurate overall reading on all different wind conditions • Woolgoolga Creek Road, 237 Halcyon Retreat • 39 Freemans Road, Woolgoolga • 30 Park Ave Woolgoolga, Park Ave went from no noise to unbearable • Greys Road, either side of bridge overpass. Noise comes straight down Greys Road as we have had no landscaping or a wall. Noise bounces off wall on opposite side.
<p>Question 4. Why it is important to monitor at the locations you suggest?</p>	<ul style="list-style-type: none"> • There are no noise barriers on East side of bridge at Woolgoolga Creek and further south, sound reflected by west side barriers and trees have been removed • Open field noise travels directly to the houses • Need to get some sleep other than Saturday night • To get true noise levels, they are unliveable • Engine braking and wind direction are major contributors to noise • Because this bypass has destroyed many peoples' lifestyles. At the highest points available in the most affected locations • For the longest period possible - up to seven weeks, not for one week only • During all weather conditions including wind and rain because we have to put up with noise from this bypass during all weather conditions
<p>Question 5. What is your top priority for additional monitoring?</p>	<p>Location</p> <ul style="list-style-type: none"> • 127 Creek Rd Woolgoolga, where was it put in 2006 for EIS • 25 Park Ave W • 30 Park Ave W • Northern side of highway at Woolgoolga Creek Road Bridge • 111 Creek Rd W - noise comes down creek line to East of Greys • End of Gresham Drive (high side) • 39 Ryan Cres Woolgoolga, back veranda • 237 Woolgoolga Creek Rd, 39 Freemans Road, 12 Grey Road • Need to monitor every area. <p>Methodology</p>

	<ul style="list-style-type: none"> • To capture that we have 100 per cent more noise than before the highway was built • Monitoring sites need to be elevated, not in protected gullies.
Resolution	<p>The following resolution was proposed on behalf of the community participants by local resident David McIntyre and, by a show of hands, it was carried unanimously: “The members of the public present consider the omission of seasonal weather variations e.g. winds and the impact on the level and direction of noise experienced invalidates the “spot” monitoring process.”</p>
Additional feedback:	<p>“Several measures could be taken to mitigate higher than predicted heavy vehicle noise (exceeds night-time 50 dBA boundary) along the Woolgoolga Bypass.</p> <ol style="list-style-type: none"> 1. For the Woolgoolga Creek Valley - extend the noise wall across Woolgoolga Creek Bridge and merge with earth mound north of the Bridge. Note, the intended gap was to provide south-west views of the valley, but a forest of trees prevents this and they offer less noise mitigation than a noise wall (numerous accredited references). 2. Erect additional 3.5m high concrete walls where residences are within 500 meters of the motorway surface. Many residents are left unprotected particularly on the eastern side. 3. Reduce Compression Braking Signs exist either end of the bypass ignoring residences along sections of the bypass where descending gradients are in close proximity to rural-residential communities such as around Woolgoolga Creek Overpass. A Reduce Compression Braking Sign is warranted on the descending southbound lane where a '110kph limit sign' is posted. 4. Relocate the redundant Compression Brake Camera and Sign from the Woolgoolga Roundabout on the old Pacific Highway to the Woolgoolga Creek Bridge area.”

Questions and comments made during the workshop process

The following questions were raised by participants during the workshop process:

Questions	Noise monitors
	<ul style="list-style-type: none">• What is the range of the monitor (1km?) Is it a consistent strength from monitor to length being monitored• What interrupts the signal?• Does it cost much for a monitor?• Who will carry out the monitoring?• Can you trust a model that does not contain major variables?• Are you checking if the model of noise "spread" is correct?• Monitoring locations/timing• Why has Forest Glen Estate been missed, 1 km north of M4?• Why not monitor in the school holidays?• Is it possible to do monitoring away from the road that captures the difference between waves, birds and trucks?• Is Old Coast Road going to be monitored? R1 is considerably north of our location.• Why are you monitoring the blueberry farms? Move the monitors behind the houses between R7 and R8 (near 21 Gresham Drive and 4 Wolstoneholme.• How wide is the area modelled?• Noise Assessment Standard/Policy• Is there an acceptable noise level?• What were the projected noise limits• Do you monitor for seven days then average it out?• How do you differentiate night and day monitoring:• Besides the modelling is there any way to confirm those in residential area/• Wind direction question drew negative response but policy is to monitor weather at two locations and take into account adverse weather, wind is a condition of atmosphere, explain? Clarify?• TWA is only part of the impact.

- How is actual met data used to compensate for the above so model is meaningful for all year.
- Why is only seven days used, we have waited for years so longer is OK.
- Why is there no impact consideration of wind, temperature inversion etc in policy?
- Why not wind 50% northerly 50% Southerly on coast 3pm daily
- Why not include relative measure - peak –background?
- Will there be more than 1 lot of testing once the road opens 100 per cent?
- How many redundant sites to check validity of modelling?
- Why is wind not factored into the monitoring when wind is half the problem?
- It the current policy doesn't account for peak traffic noise what is being done to change the policy? And will it be retrospective?

Trucks

- Why do B Doubles and semis use engine brakes 300 metres north of Moonee Beach on a perfectly good motorway?
- Why no signs telling trucks to limit noise?
- Is the trucking industry involved in reducing noise?
- Many trucks every night, how do we know that will be captured?
- What are the projections for increased trucks on the road?

Noise mitigation

- There are no mounds or noise walls at Moonee Village. Why?
- Poor noise absorbing surface of the grey concrete walls (no texture) - do they reflect the noise?
- Why are there sound barriers installed in other locations and not Moonee?
- Noise barriers - which is more effective - concrete or glass
- Is it possible to have double glazing in all houses?
- Can you plant some trees up to the wall size where it is lowered?
- How do we sleep at night with the truck noise?
- What type of noise mitigation could we expect following the operational noise assessment process?

Noise assessment process

- How is each property "analysed"
- How do you analyse each property with only 8 monitoring locations?
- Wind direction is not being considered. Do we have recourse to action at a later date due?
- Who decides what noise level is acceptable?

	<ul style="list-style-type: none"> • Regardless of what the monitoring says, what will be done to address the noise? What is the appeal process? If it says noise levels exceed acceptable levels what mitigation will be put in place? • Is the point of monitoring to confirm or reject what residents are trying to tell you.? Or to devise proper mitigation? • Rain and trucks equals twice normal noise level (must be included in your program) • A policy criterion of 50/55dB average is limited, then use d in a limited model that does not include wind, inversion or compensate the actual monitoring data for these. It is used to decide "absolute" contours on which dollar decisions are made - crazy. • Is Renzo Tonin impartial and independent? Who is paying them? What measures are in place to retain independence of RenzoTonin? • Consultation process • Can we make written submissions? • Will every home and home owner be contacted when the report is available? • Will every workshop participant receive a copy of the report? • What is the appeals process? Who is the contact to have further discussions? • Explain the process moving forward after the monitoring is done? • Where is the social impact - all this monitoring maths? Has the trucking industry been informed and asked to help in NSW. • Could we organise residential monitoring upon application e.g. 47 Diamond Head Drive received noise monitoring • Why didn't you hold this meeting at a property on the highway. • When will people be told exactly where the monitors are? • 127bCreek Rd W, We would like a copy of the noise test done in 2006? • Why are these meetings in Coffs Harbour? The timing is too early for those who are travelling.

The following is a list of comments made by participants during the workshop process

Comments	Causes/complaints about noise <ul style="list-style-type: none"> • Prior to the upgrade we were told the noise would reduce. It has increased due to higher speeds. Higher Speeds = higher engine noise.
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- Possible causes of noise at Moonee: Noise may be reflects off the large wall that is the 'face' of the hill removed from the highway just before Moonee Beach/Moonee turn off.
- At Graham Drive south roundabout, when vehicles travel on new surface the noise is minimal but when they hit the old road the noise rises exponentially
- Quality of life is stuffed, 2km away at Birkwood Close
- Heritage Park, concrete wall has created a tunnel effect
- Pretty sure sound carries down easements and waterways unhindered
- Smiths Road, Emerald Beach, before the upgrade the noise level overall was lower. Since raising the height of the highway the noise level has raised and is affecting residents along Sandy Beach/Heritage Park. The vegetation used to absorb and help buffer the sound. It needs to be replaced
- At former "Lake Russell", Smith Road, the noise travels over the Lake to affect more residents now. Sound travels up valley. We live 1-3 kilometres on Smiths Road on a hill, the noise is worse and much louder than before highway upgrade
- Noise comes from tyres, 4wd's and trucks, whine from large trucks
- We live on Old Coast Road and noise is now much worse than in the past
- The absence of a wall on the Western side opposite the highway on Old Coast Road means that all the noise is reflected back to us
- Hoys Road, Moonee Beach, louder up stairs of two storey home, noise from Hwy and Old Hoys Road, large number of trucks along Hoys Road, noise from highway including trucks going north going up slope and trucks going south going down slope. There is an increase in the length of Hwy that is open to our frontage because of the removal of trees. We are unable to sit and talk on our veranda.
- Noise down valley from Ulga Creek Bridge is heard 1.5 km away to Gently Anie Road
- Noise comes through valley south of highway reflects off surrounding hills
- Noise is created by vehicles at roundabout at Emerald Heights Drive
- High pitched constant hum from general traffic is also the problem
- Residents of Estuary Ave, Seachange and Tidal Cres. Invite you to a sleep over to experience the traffic noise
- I have personally been monitoring max peak DBA readings on correctly calibrated reader. I have had no peak reading of 54 dBA in over six months. The main problem I have is that Leq 9 hour reading is an unfair method of dealing with the noise problem. I have readings over and avobe85-90 dBA especially on a SW wind.

We do not sleep soundly anymore and have not since the bypass opened. I have three sons doing university and HSC. They all suffer as we do. The max peak DBA are the disruptive readings but they are not addressed. Roads and Maritime basis noise mitigation on readings that are simply not the problem. I have lived on this property for over 36 years Roads and Maritime with their bypass has ruined my property and continue to do nothing to alleviate our problems. All coincidences go 100 per cent Roads and Maritime side not the property owner's side. Thicker glass on 3 sides of our house not four and a couple of air conditioners do not work. This is another example of an ineffective quick fix. A noise wall between cuts 18 and 19 and north of Woolgoolga Creek is the only solution to alleviate some of the noise for us and our neighbours. With all the windows and doors closed, quiet music playing and foam ear plugs we still do not sleep soundly. We do not function properly at work. Children's studies are affected and the Roads and Maritime is to blame. Roads and Maritime needs to fix the problem correctly, not with band aid solutions.

Light

- Lights from Hwy and from cars turning around at Western Drive shine through our windows (Hoys Rd)

Monitors

- Monitoring is too far apart. Need a lot more monitoring stations.
- Concerned the monitoring is not accurate over the night when averaged
- The noise at the Highway is not necessarily the loudest.
- What matters is where the noise goes.
- Capture ambient impacts at other sensitive sites e.g. National Park and beach. Noise has spread to previously unaffected areas

Trucks

- Engine braking noise is not the main problem, it's the acceleration of traffic at 110kmh and high pitch whining of trucks 18 wheels
- Truck Drivers need to be educated - no compression braking, rotating of horns as per handbook for transport
- Trucks are the problem. Trucks separated from cars - sent out west. Mandatory "truck skirts" as used in Europe, helps to mitigate noise
- Government's policy is looking to increase the number of B Doubles on the highway with no regards to the impact on residents

- Noise engine braking needs to be addressed. Do something about truck noise checking at check stations, signage, cameras, fines

Noise Assessment Process (standards/policy)

- “Forest” Policy created by EPA. A noise policy is required to understand wind conditions and seasonal changes of prevailing winds that carry the noise. Be proactive and understand and implement for the future.
- Average is a waste of time. Peak noise wakes us.
- Consider peak noise events as disturbing along with average noise
- The Hwy plan divides a community and the noise is impacting on quality of life and will have health impacts.
- Capture quality of life impacts, not just individual houses, average noise is wrong. Peak noise impacts day to day living and quality of life in this area.
- Whole communities have had major changes to both north and south Motorways
- Consider various monitoring technology to further enhance quality of observations
- Average noise levels don’t equal disturbance levels
- Average readings are not acceptable. Above average noise is what wakes us out of a sound sleep then keeps us awake
- Maximum measurements need to be analysed for night time period
- Noise standards are not adequate
- Need to monitor every single house
- Not enough monitoring sites, topography
- Wind needs to be taken into account. The valley gets very big winds - 20 knots in a day when north-east winds blow in summer
- Policy driven not people driven.

Weather

- Rain makes noise louder
- Wind conditions/direction is a big factor in monitoring, it should be factored into modelling
- Wind brings the noise up the valley
- Wind conditions should be included in noise monitoring
- Take into account changes in weather, seasonal changes, winds, temperature inversion, noise trapped under smoke from fires
- Wind and weather varies over different months

	<ul style="list-style-type: none"> • Temperature inversion issues in Winter, trapping noise. <p>Mitigation comments</p> <ul style="list-style-type: none"> • Monitoring is great but we are here about mitigation, cost saving vs. impact on the community • Concrete barriers are not working • Earth mounds and trees block noise that has been created • Reduce speed back to 80kmh • We don't want double glazed windows in this location and climate – amenity concerns. <p>Consultation process</p> <ul style="list-style-type: none"> • I don't think anything is going to happen • Leaving feeling that nothing is going to change • Photography is out of date - look at Google Earth.
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Mitigation suggestions

The following is a list of suggestions made to mitigate noise on the Sapphire to Woolgoolga Upgrade:

	<p>Reduce the speed limit</p> <ul style="list-style-type: none"> • Higher speed = higher noise from trucks. Kempsey Bypass is 100km/h limit, why can't we have 100km/h limit due to high residential population all the way along the highway. This requires no money and can be done quickly • Decrease the Sapphire to Woolgoolga speed limit immediately • 110 speed limit. 110kms too fast creates extra noise • The speed limit should be reinstated to 80km • Increase in noise since increase in speed and tree barrier destroyed. • Landscaping • Need to plant more trees and shrubs along new freeway on freeway side of barriers to soften the noise, especially of trucks • Replant trees
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- Replace the trees that were removed from the end of Split Solitary Road and along the old highway to the south of Split Solitary Road
- The original topography has changed, replace and revegetate hills.eg South East Fiddaman Road and highway.

Trucks

- Don't just check compression braking, the noise of the differential gear boxes (Drive train of trucks) is worse
- Install signs re engine braking
- Compression braking should be banned.

Noise barriers/treatments

- Noise barrier on Western side of Hwy opposite Service Station
- Noise specialist stated tonight the noise wall may not be of a design or material that actually absorbs sound
- Ensure that all installed noise walls are "sound absorbing walls"
- We need absorbent barriers not reflective
- A noise wall at least would be required
- Earth walls to reduce noise at Moonee Beach (eastern side)
- The concrete noise walls bounce the sound. Preferred solution is "Earth Banks" along the whole front of Lake Russell Smith Road area. There is ample space to do this while we have to suffer the B. Double trucks that are the main culprit of all the sound issues
- We live in rainforest etc, why would I want double glazing to stay inside?
- Sound barriers are required for both sides of highway (Woolgoolga bypass)
- Noise barrier on Woolgoolga Creek Bridge on the east side of the highway, many trees have been removed
- Sound walls reflect noise which affects Sandy Beach
- If houses must have double glazing - proof there must be a problem.
- Concrete walls bounces sound, need more absorbing sound barriers such as Earth Banks with vegetation to also absorb the CO2 pollution. Noise walls don't stop exhaust levels

- Extension of noise walls in length and height.

Road Surface

- Road surface from southern end of new work requires low noise surface to the new low noise section south of the speed camera
- The surface line marking is confusing where lines have been added and removed
- Noise has changed as per relation to new surface highway.